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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,092	08/04/2005	Shari Weinberg	263065US55PCT	5417
22850	7590	02/12/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
GRAY, JILL M				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
02/12/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/518,092

**Applicant(s)**

WEINBERG ET AL.

**Examiner**

Jill Gray

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The objection to the specification is moot in view of applicants' amendments.
2. The rejection of claims 1-17, 25-27, 29, and 32 under 35 U.S.C. 102(b) as being anticipated by El-Hibri et al., 5,164,466 (El-Hibri) is withdrawn in view of applicants' arguments.
3. The rejection of claims 1-3, 6-10, 13-15, 25-27, 29, and 32 under 35 U.S.C. 102(b) as being anticipated by Harris 4,957,978 is withdrawn in view of applicants' arguments.
4. The rejection of claims 1-17, 25-29, 32-34 under 35 U.S.C. 103(a) as being unpatentable over El-Hibri 6,075,100 in view of Harris 4,957,978 is withdrawn in view of applicants' arguments.
5. The rejection of claims 18-24 under 35 U.S.C. 103(a) as being unpatentable over El-Hibri et al., 5,164,466 or Harris, 4,957,978 or El-Hibri 6,075,100 in view of Harris 4,957,978, and each further in view of Hilker 4,391,848 is withdrawn in view of applicants' arguments.
6. The rejection of claims 27-29 and 31-35 under 35 U.S.C. 103(a) as being unpatentable over El-Hibri et al., 5,164,466 or Harris, 4,957,978 or El-Hibri 6,075,100 in view of Harris 4,957,978, and each further in view of Gilliam 2,754,353 is withdrawn in view of applicants' arguments.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-17, 25-29 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over El-Hibri 5,164,466 in view of Brennan et al., 6,492,892 B1 (Brennan).

El-Hibri discloses a polymer composition comprising a blend of a polyphenylsulfone and a polysulfone wherein the polyphenylsulfone and polysulfone each have structural repeating units as claimed in present claims 1 and 13. In addition, El-Hibri discloses that the polyphenylsulfone comprises from about 25 to about 99 percent by weight and the polysulfone comprises from about 1 to 75 percent by weight, which is in the ranges contemplated by applicants in claims 2-5 and 14-17. The polymer composition can be an insulation coating for electrical conductors. The skilled artisan would immediately envisage an insulated wire and method of coating said polymer composition on a bare wire, per claims 1 and 13. See entire document, for example abstract, formula (2), formula (3), column 3, lines 3-24, and column 6, lines 56-59. Also, El-Hibri discloses that the composition can contain other additives of the type set forth by applicants in claims 6-10. See column 6, lines 56-68. Regarding claims 11-12 and 25-26, the language of "can be a copolymer wherein up to less than 50 mole %..." is not limiting. This language does not constitute a clear positive recitation that the PPSF or PSF are copolymers, and the requirement of "up to less than 50 mole%" does not require the presence of the recited compound residues. Hence, the teachings of El-Hibri meet the requirements of these claims. Furthermore, it should be noted that El-Hibri discloses the same type of resins i.e. "RADEL R" and "UDEL P-1700" as disclosed

by applicants in their specification as being suitable. Accordingly, the resin of El-Hibri necessarily meets the requirements of present claims 11-12 and 25-26. The polymer insulation and electrical conductor of El-Hibri anticipates the inventions of claims 27, 29, and 32. Though El-Hibri discloses insulation and electrical conductors which broadly includes magnet wires, he does not specifically disclose a magnet wire.

Brennan teaches a magnet wire used in the formation of transformers per claim 28. See entire document and, for example the abstract. In addition, Brennan teaches that conventional magnet wires are usually insulated with an insulation that can be a polyphenylsulfone resin such as "RADEL R". See column 2, lines 54-65.

As set forth above, El-Hibri discloses polymer insulation and electrical conductors but does not specifically disclose a magnet wire. It is the position of the examiner that Section 103 requires us to presume full knowledge by the inventor of the prior art in the field of his endeavor. *In re Winslow*, 151 USPQ 48 (CCPA 1966). It is also the examiner's position that the skilled artisan is expected and presumed to know something about the art than what a reference literally teaches. In the instant case, the prior art teachings of Brennan clearly establishes magnet wires coated with polyphenylsulfone at the time the invention was made was known and conventional. It would have been obvious to one having ordinary skill in the art to use the polyarylethersulfone blend polymer insulation of El-Hibri as insulation for a magnet wire, motivated by the teachings of Brennan and with the reasonable expectation of success of obtaining a magnet wire having good chemical resistance and excellent mechanical properties and heat resistance.

Therefore, the combined teachings of El-Hibri and Brennan would have rendered obvious the invention as claimed in present claims 1-17, 25-29, and 32-34.

9. Claims 1-17, 25-29, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over El-Hibri 6,075,100 in view of Brennan et al., 6,492,892 B1 (Brennan).

El-Hibri discloses a polymer composition comprising a blend of a poly(aryl ether sulfone) (polyphenylsulfone) and a polysulfone wherein the polyphenylsulfone and polysulfone each have structural repeating units as claimed in present claims 1 and 13, and are formed from the same type of aromatic dihydroxy compound residues set forth in claims 11-12 and 25-26. See entire document, for example, abstract, column 3, lines 16-20 and column 4, lines 19-30. Also regarding claims 11-12 and 25-26, the language of "can be a copolymer wherein up to less than 50 mole %..." is not limiting. This language does not constitute a clear positive recitation that the PPSF or PSF *are* copolymers, and the requirement of "up to less than 50 mole%" does not require the presence of the recited compound residues. Hence, the teachings of El-Hibri meet the requirements of these claims. Moreover, El-Hibri discloses the same type of resins i.e. "RADEL R" and "UDEL P-1700" as disclosed by applicants in their specification as being suitable. Hence, the resins of El-Hibri necessarily have the requisite mole% of aromatic dihydroxy compound residues. Note Examples. The composition of El-Hibri can contain additional components such as reinforcing filler, fiber pigment and/or additive of the type contemplated by applicants in claims 6-10. See column 5, line 65 through column 6, and line 10. El-Hibri discloses that the blends comprise polyphenylsulfone in an amount of from about 50 to about 5 wt%, as required by

present claims 2-3, 5, 14-15, and 17. It should be noted that the disclosed "about 50 wt%" necessarily includes amounts greater than 50 wt% because the term "about" means that exactitude is not being claimed and includes amounts greater than and less than the referenced amount. Hence the disclosed "about 50 wt%" renders obvious the instant claimed "greater than 50 wt%" and "about 55 wt%." Regarding claims 4 and 16, it is the examiner's position that since the result sought and the ingredients used were known, it was within the expected skill of one having ordinary skill in this art to arrive at the optimum proportion of those ingredients and any improved results would have resulted from experimentation of an obvious nature and were nothing more than one would expect. *In re Reese*, 129 USPQ 402 (CCPA 1961).

El-Hibri does not disclose the specific usage as insulation for electrical conductors.

Brennan teaches a magnet wire used in the formation of transformers per claim 28. See entire document and, for example the abstract. In addition, Brennan teaches that conventional magnet wires are usually insulated with an insulation that can be a polyphenylsulfone resin such as "RADEL R". See column 2, lines 54-65.

As set forth above, El-Hibri discloses polymer insulation but does not specifically disclose insulation for magnet wires. It is the position of the examiner that Section 103 requires us to presume full knowledge by the inventor of the prior art in the field of his endeavor. *In re Winslow*, 151 USPQ 48 (CCPA 1966). It is also the examiner's position that the skilled artisan is expected and presumed to know something about the art than what a reference literally teaches. In the instant case, the prior art teachings of Brennan

clearly establishes magnet wires coated with polyphenylsulfone at the time the invention was made was known and conventional. It would have been obvious to one having ordinary skill in the art to use the polyarylethersulfone blend polymer insulation of El-Hibri as insulation for a magnet wire, motivated by the teachings of Brennan and with the reasonable expectation of success of obtaining a magnet wire having good chemical resistance and excellent mechanical properties and heat resistance.

Therefore, the combined teachings of El-Hibri and Brennan would have rendered obvious the invention as claimed in present claims 1-17, 25-29, and 32-34.

10. Claims 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over El-Hibri 5,164,466 in view of Brennan 6,492,892 B1 or El-Hibri 6,075,100 in view of Brennan, 6,492,862 B1 each as applied to claims 1-17, 25-29, and 32-34 above, and further in view of Hilker 4,391,848.

El-Hibri '466, in view of Brennan and El-Hibri '100 in view of Brennan are all as applied above but do not teach the specific method steps for producing a magnet wire. Hilker teaches a method for forming a magnet wire wherein the coating material can be polysulfone, said method comprising a coating step that can be melt extruding that is free of solvent, per claims 18-20. In addition, Hilker teaches that the metallic magnet wire is preheated prior to coating said wire and that the insulation coating is melted prior to being coated on said wire, as required by claims 21-22. Also, Hilker teaches that the coated wire is hardened and that a quenching step can be included if desired, per claims 23-24. See entire document, in particular, abstract, column 3, lines 5-10, column



4, lines 31-37, column 5, line 17, column 7, lines 11-14, column 7, line 44, and column 9, lines 24-40.

As set forth above, Hilker teaches that polysulfone coating materials are suitable materials that can be used in his method. This teaching would have provided a suggestion to the skilled artisan that polysulfone resin blends could be used with a reasonable expectation of success of forming an insulated magnet wire. Accordingly, it would have been obvious to one having ordinary skill in the art to form a magnet wire by using the compositions of El-Hibri '466 in view of Brennan or El-Hibri '100 in view of Brennan as the coating material in the method of Hilker to produce a magnet wire.

Therefore, the combined teachings of El-Hibri '466 in view of Brennan or El-Hibri '100 in view of Brennan, each taken in view of Hilker '848 would have rendered obvious the invention as claimed in present claims 18-24.

11. Claims 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over El-Hibri 5,164,466 in view of Brennan 6,492,892 B1 or El-Hibri 6,075,100 in view of Brennan, 6,492,862 B1 as applied to claims 1-17, 25-29, and 32-34 above, and further in view of Gilliam 2,754,353.

El-Hibri '466 in view of Brennan and El-Hibri '100 in view of Brennan are all as applied above but do not teach that the magnet wire is in contact with an insulating fluid. Brennan as set forth above teaches conventional magnet wires insulated with polyphenylsulfone resin, wherein said magnet wires are used in the formation of transformers. Gilliam teaches that the utility of magnet wires in electrical devices such as motors, generators or transformers is well known in the art. See entire document, for

example, column 1, lines 15-19. Hence, it would have been obvious to the skilled artisan to use the insulated wires of El-Hibri '466 in view of Brennan or El-Hibri '100 in view of Brennan in the formation of articles such as motors, generators or transformers. Regarding claims 31 and 35, Gilliam teaches that the metallic wire is in contact with an insulating fluid such as silicone oil which increases the abrasion resistance and flexibility of the wire. It would have been obvious to one having ordinary skill in the art to include an insulating fluid in contact with the metallic wire in order to increase the flexibility and abrasion resistance of the wire.

Therefore, the combined teachings of El-Hibri '466 in view of Brennan or El-Hibri '100 in view of Brennan, each taken in view of Gilliam would have rendered obvious the invention as claimed in present claims 31 and 35.

### ***Response to Arguments***

12. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is 571-272-1524.

The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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